EMBROIDERY (from OF. embroder, from bord, border). The art of ornamenting cloth and other materials with needlework. But flat ornaments wove directly into the warp, like those on the fragments of linen robe found in 1903 in the tomb of Thothmes IV (fifteenth century, B.C.), and in many Coptic and Peruvian textiles, are tapestry; and embroidery on net and cutwork belongs with lace.

Historical Development. Embroidery in its crudest form is one of the oldest of the decorative arts. It was probably applied to skins before the art of spinning and weaving had been developed, and almost as soon as the use of the needle and thong for joining together skin garments was developed. Among the primitive tribes of Central Africa the girls embroider skins with figures of flowers and animals, bright shells and feathers also being used in their decoration. The Laplander embroiderers use clothes and skin garments with a network of reindeer bone, thread of reindeer sinews, and applied of strips of hide. Of the textiles of ancient Babylon and Assyria no fragments have survived. But the Nineveh mural reliefs in the British Museum show Assyrian robes with both geometrical and floral ornament, and the famous relief now in the Louvre from the palace of Darius I (521-485 B.C.) shows Persian robes with diaper pattern. These ornaments, like those of the hangings of the tabernacle described in the Book of Exodus, may have been either embroidered or applied. Among the ancient Greek textiles exhumed from Crimean graves are both tapestries and embroideries, now preserved in the Hermitage at St. Petersburg. One of the embroideries attributed to the fourth century B.C. is in colored wools on wool and shows a cavalier with honeysuckle ornament. Also among the Romans embroiderers and tapestries were used side by side.

Martial, in the first century A.D., writes that the embroiderers of Babylon have been driven out of fashion by the tapestries of Egypt (victa est post sine Niloto tenui Babylonia acus). After Byzantium (Constantinople), at the beginning of the fourth century A.D., was established by Constantine as the capital of the Roman Empire in place of the city of Rome, embroideries elaborate with gold were used on secular as well as on ecclesiastical robes. Preserved in the sacresty of St. Peter's at Rome is a blue silk garment, probably Byzantine work of the twelfth century, known as the "dalmatic of Charlemagne." Embroidered on the front is the Triumph of Christ, on the back the Transfiguration, both with captions in Greek. The comparatively brief textile prominence of Palermo in Sicily, with Saracen workmen, under Norman kings, is commemorated by richly embroidered Imperial coronation robes preserved at Naples and described in Boët's Kleisthenes. In the library of the English cathedral of Durham are fragments found in the tomb of St. Cuthbert, embroidered in gold in the tenth century.

In the public library of the French town of Bayeux is preserved the famous Bayeux Tapestry (q.v.), which is not a tapestry at all, but an embroidery on the front of a body. The most beautiful are the Italian embroidery of the fourteenth century. One of the finest, a richly colored altar frontal in gold, silver, and silk, preserved in the Florentine Archæological Museum, is signed Jacobus Cambi de Florentia me fecit MCCXXXVIII (James Cambia of Florence made me in 1338). Among fifteenth-century Italian embroideries are those in the Opera del Duomo in Florence picturing the story of St. John, attributed to the design of Antonio Pollaiuolo. In the Cluny Museum is a sixteenth-century Italian embroidery after Raphael which pictures the Israelites worshipping the golden calf. It is an oval, 20 by 32 inches, the only piece remaining of a furniture set with gold ground, picturing 40 scenes from Hebrew history, preserved at the abbey of Saint-Denis until the French Revolution. In early Spanish embroideries Moorish influence was strong, and East Indian influence in Portuguese embroideries. Early German embroideries cling close to Byzantine traditions, keeping the draperies flat without folds and covering them with pattern.

As in tapestry, so also in embroidery, the Germans made much use of long narrow bands of hang above choir stalls, with story told in sequence of scenes and descriptive captions. An eleventh-century Danish embroidery is the one, in the church at Odense, covering the relics of King Canute (1016-1035).

In the Netherlands in the fifteenth century, under the Duke of Burgundy, embroidery flourished, as did tapestry and painting. Many textile arts utilized the designs of the best painters. Among the best examples of the period are the ornement de la tison d'or, a set of vestments now in the Hof-Museum at Vienna; and the red velvet cope, with orphreys and hood picturing the seven works of mercy, in the museum at Tourin. In the sixteenth century and after, the embroiderers of Holland were much influenced by the Dutch conquests in the East Indies, and many embroideries were produced in the Far East, under Dutch direction, for exportation to Holland.

An exquisite French embroidery of the fifteenth century in the Museum of Chartres is in the form of a triptych with a Pictá in the middle, St. John the Evangelist on the left, and St. Catherine of Alexandria on the right. In the sixteenth century in France were produced many ornamental embroideries without figures—velvet, satin, or silk florals and scrolls on woolen. Splendid examples of seventeenth-century French embroidery are the vestments given by Louis XIII to the cathedral of Reims and still preserved there. Louis XIV not only had many embroiderers of his own household, but also installed others at the Gobelins, whose duty it was to make draperies and furniture coverings; among these embroiderers were Simon Fayette, whose specialty was figures, and Philippe Ballard, whose specialty was landscapes. In the thirteenth century English embroidery was celebrated throughout western Europe, and the phrase de opere anglicano occurs constantly in inventories. The most famous example is the Lyon cope in the Victoria and Albert Museum at South Kensington. It is covered with embroidered medallions picturing Christ on the cross, Christ and Mary Magdalen, Christ and St. Thomas, the death of the Virgin, the burial and coronation of the Virgin, St. Michael, and each of the Twelve Apostles separately. The spaces between the medallions contain six-winged cherubim. The figures are in gold, silver, and colored silk, with medallion grounds of green silk embroidery between medallions. The orphrey with coats of arms and the lower border are of later date. The cope takes its name
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from the convent of Syon, near Isleworth, to which it formerly belonged, being taken to Portugal at the time of the Reformation and not brought back to England until the nineteenth century.

During the fourteenth and fifteenth centuries many excellent ecclesiastical embroideries were produced in England, and in the sixteenth century the costumes of the nobility were magnificent with embroidered florals. Black work, done in silk or linen, was popular in the reign of Elizabeth. So also was petit point, sometimes called tapestry or needlework tapestry, an all-over cross stitch on coarse canvas in imitation of woven tapestries.

Richly costumed figures were introduced, often in small medallions in fine point on a ground of coarse point. During the seventeenth and eighteenth centuries petit points in floral and purely ornamental designs continued to be made in England for use as draperies and furniture coverings and sometimes as framed pictures. During the latter half of the nineteenth century embroidery shared the revival of interest in decorative art (q.v.), and artists like William Morris, Burne-Jones, and Walter Crane supplied designs. But the majority of embroideries made to-day are either copies of ancient ones (some of them intended for sale as antiques), or purely ornamental patterns produced at small expense on the bonnaz or other machines in Switzerland, Saxony, and elsewhere.

The people of the Orient continue, as in ancient times, to excel in the art of embroidery, and the woolen shawls of Cashmere are still world famous. The Chinese are perhaps the most laborious and elaborate hand embroiderers, their best work being in silk. The figures are either in colored silk alone or combined with gold and silver thread; sometimes the figures of men, horses, dragons, and the like are outlined in gold cord and filled up with shaded silk. The Persians, Turks, and Hindus use, besides silk and gold and silver threads, beads, spangles, pearls, and precious stones. Some of the Oriental embroideries include a still wider range of materials. Feathers are largely and very tastefully employed, and also the skins of insects, the nails, claws, and teeth of animals; nuts, pieces of fur, and skins of serpents are among the materials drawn upon. Coins, which are so commonly used as ornaments of the hair of unmarried women, are also worked into embroidery on their dresses. The Indian women embroider with their own hair and that of animals.

The Process of Embroidery. The tools of the embroiderer are the simplest, consisting of needles to draw the different kinds and sizes of thread through the work, a frame in which to hold the material (which may be omitted in small pieces of work), and scissors to cut the thread. A stitch is the thread left on the surface of the cloth after each ply of the needle. The most common forms of canvas stitch, with the needle passing through the interstices of warp and weft of the canvas, are cross stitch, tent stitch, Gobelin stitch, Irish stitch, plait stitch. Crewel stitch is a diagonal stitch used in outlining. Some of the other principal stitches are chain or tambour, herringbone (so called because of its resemblance to a fish's backbone), buttonhole, feather, rope, of which the French knot is a complicated form, satin, long and short, darning, and running stitch. About the twelfth century the modeling and padding of figures became common; i.e., embroidery was performed by sewing onto the material as well as into it.

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